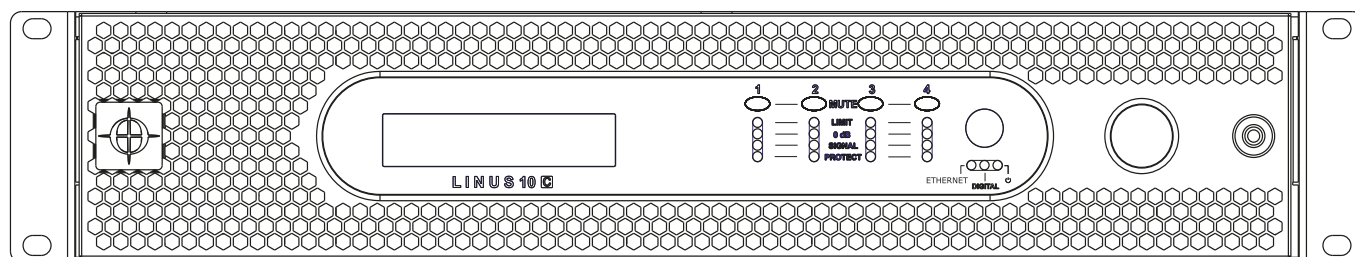


CODA
C O D A A U D I O



LINUS10-C



INFORMATION FOR USE FOR MODELS CODA AUDIO LINUS10-C

The leading version of this brochure is the English one which shall prevail
to the exclusion of the national translation on hand.

USER MANUAL v2.0

CODA
C O D A A U D I O



Manufacturer

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Subject to change. Please visit our website www.codaaudio.com for the latest version of this User Manual.
Please note that the leading version of CODA Audio manuals is always the English one.

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IMPORTANT SAFETY INSTRUCTIONS

1. General

The amplifier may only be used in accordance with the information provided in the user manual. Before and during the usage of the amplifier please ensure that all recommendations, especially the safety recommendations as detailed in the user manual, are adhered to. The CODA Audio LINUS amplifier is designed for the amplification of pulsed audio signals. The amplifier should only be connected to loudspeakers with an average impedance as indicated.

2. User manual

Read the information before use (user manual) and heed all warnings. During the lifetime of the amplifier keep this user manual together with the warranty certificate in a safe place for later reference. The user manual forms an integral part of the amplifier. It is recommended to check the CODA Audio website for any updates and new versions of this manual. Reselling the amplifier is only possible if the user manual is available. In case of reselling the amplifier, the reseller has to document any changes made to the amplifier in writing and pass the documentation on to the buyer.

3. Environments

Use this amplifier only in E1, E2, E3, E4 or E5 environments according to IEC/EN 55103-2:2010 "Electromagnetic compatibility - Product family standard for audio, video, and audio-visual and entertainment lighting control apparatus for professional use - Part 2: Immunity".

4. Mounting/placement

Do not place this amplifier on an unstable cart, stand, tripod, bracket, or table. The amplifier may fall, causing serious injury and serious damage to the product. Any mounting of the amplifier should follow the manufacturer's instructions. CODA Audio can recommend suitable mounting racks and accessories.

5. Mains connection

The amplifier may only be connected to a socket with a protective earth conductor. This is a class 1 device that requires an external earth connection at all times. A missing earth may cause unexpected and high voltages present on the metal casing and surrounding conductors. The main power switch on the front panel is a 'soft' switch. Ensure that the mains power can be isolated from the amplifier at any time.

6. Power cord protection

Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon them or against them, paying particular attention to cords and plugs and the point where they exit from the amplifier. If the cord is damaged in any way obtain a replacement cord before further use.

7. Heat

Do not use this amplifier near any heat sources such as radiators, heaters, stoves, or other apparatus that produce heat.

8. Water and moisture

Do not expose this device to rain or moisture. Do not use this amplifier near water (for example swimming pools and fountains). Do not place any objects containing liquids, such as bottles or glasses, on the top of the unit. Do not splash liquids on the unit. There is no protection against splashing water (IP-20 equipment).

9. Ventilation

Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the amplifier and to protect it from overheating. These openings must not be blocked or covered. This amplifier should not be installed unless proper ventilation is provided, and the following instructions are adhered to. When installing into racks, careful consideration should be taken to ensure that the force air cooling operates to its maximum efficiency. Cold air is drawn in through the front of the unit, with the hot air expelled from the rear. Ensure that the rear is not obstructed to allow the heat to escape. Do not install the amplifier above or below any other equipment that has a different forced air flow cooling design. If a space is to be left between multiple units then a fixed rack space blank should be used. A vented or slotted space should not be used as this can significantly reduced the efficiency of the forced air cooling of the unit.

10. Interference of external objects and/or liquids with the appliance

Never push objects of any kind into this amplifier through any openings, as they may touch dangerous voltage points or

short out parts that could result in fire or electric shock. Never spill liquid of any kind on the amplifier. Do not use the amplifier in a place where is the potential risk of objects/liquids falling onto or into the amplifier. Where possible, the amplifier should always be used within a protective case or rack.

11. Connections

Before connecting external equipment to the amplifier, ensure that it is safe to do so. Remove the mains supply from the equipment where necessary. Failure to do so may cause an electric shock and serious personal injury. Read the user manual of the other equipment carefully and follow the instructions when making the connections.

12. Lightning

For additional protection of this amplifier during lightning storms or when it is left unattended and/or unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the amplifier due to lightning and power line surges. Disconnection from the mains power supply can only be achieved by removing the plug from the mains socket or by external disconnecting all poles from the mains.

13. Damages that require service

Unplug this amplifier from the mains supply and refer to your dealer/distributor or other authorized repair workshop if any of the following situations occur:

- if liquid has been spilled or objects have fallen into the amplifier,
- if the amplifier has been exposed to rain or moisture,
- if the amplifier has been dropped or damaged in any way,
- if the power supply cord or plug has been damaged,
- when the amplifier exhibits a distinct change from its normal function or performance,
- in case the amplifier has been used in a dusty environment for quite a period of time.

14. Servicing

All service and repair work must be carried out by a dealer/distributor authorized by CODA Audio. Do not attempt to service this amplifier yourself. Opening or removing covers may expose you to dangers or other hazards. The amplifier may only be opened by qualified personnel. Please refer to your dealer/distributor.

15. Spare parts

When spare parts are required, the dealer/distributor will only use spare parts specified by the manufacturer. The use of unauthorized spare parts may result in injury and/or damage through fire or electric shock or other electricity-related hazards.

16. Safety check

Upon completion of any service or repairs to this product, other than by the factory, ask the dealer/distributor to perform safety checks to determine that the amplifier works properly. Recommendations on how to carry out the safety test can be found in DIN VDE 0701-0702 "Maintenance, Modification and Test of Electronic Appliances".

17. Cleaning

Ensure that periodic cleaning of the dust filters is carried out to maintain the best possible cooling. Monitor the environment that the amplifier is operating in and adjust the cleaning frequency as necessary. Unplug this amplifier from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Clean only with dry cloth.

18. Packaging and shipping

When shipping the CODA Audio LINUS amplifier, always use the original shipping carton and packing materials. For maximum protection repack the unit as it was originally packed at the factory.

19. Altitude (for China)

The amplifier shall be operated at altitudes below or equal 2000 m.





CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION - HIGH VOLTAGE HAZARDS
EXIST WITHIN THIS PRODUCT.
REFER ALL SERVICING TO
AUTHORIZED PERSONNEL



THE LIGHTNING FLASH WITH ARROW HEAD SYMBOL IS INTENDED
TO ALERT THE USER TO THE PRESENCE OF UNINSULATED DANGEROUS
VOLTAGE WITHIN THE PRODUCT'S ENCLOSURE.



THE EXCLAMATION MARK IS INTENDED TO ALERT THE USER
TO IMPORTANT INSTRUCTIONS ALSO FOR MAINTENANCE
IN THE LITERATURE ACCOMPANYING THE AMPLIFIER.



WARNING - TO PREVENT FIRE OR SHOCK HAZARD,
DO NOT EXPOSE THIS AMPLIFIER TO RAIN OR MOISTURE.



CAUTION - RISK OF ELECTRIC SHOCK- DO NOT OPEN.



THE AMPLIFIER SHALL ONLY BE OPERATED
AT ALTITUDES BELOW OR EQUAL 2000 m.



THE AMPLIFIER MAY ONLY BE CONNECTED
TO A SOCKET WITH A PROTECTIVE EARTH CONDUCTOR.

LINUS10-C CE CONFORMITY

CE CONFORMITY

Declaration of conformity in accordance to EC Directives:

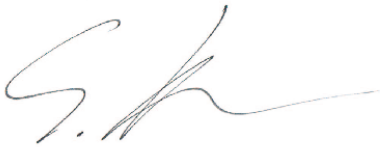
Electromagnetic compatibility (Council Directive 2014/30/EU, EMC)
Low-voltage electrical equipment (Council Directive 2014/35/EU, LVD)
2011/65/EU (RoHS2 Directive)

Manufacturer's name: **CODA Audio GmbH**
Manufacturer's address: **Boulevard der EU 6, 30539 Hannover, Germany**

declares that the product with the model name: **LINUS10-C** conforms to the following standards:

IEC/EN/UL/CSA 62368-1:2016 Safety
IEC/EN 55103-1:2010 Emission (for all environments E1/residential to ES/industrial)
IEC/EN 55103-2:2010 Immunity (for all environments E1/residential to ES/industrial)

The operating conditions and application environments presupposed in the information for use (user manual) are to be kept accordingly.



Svetlomisir Aleksandrov

EC DECLARATION OF CONFORMITY

Hannover, 01.06.2019



At the end of its life, this product may not be disposed of in the normal waste, but rather must be disposed of at a collection point for recycling electrical and electronic devices. The materials are recyclable according to their labelling. You make an important contribution to protecting our environment by reusing, recycling or utilising old devices in other ways. Please ask the municipal administration where the appropriate disposal facility is located.



CONSIGNES DE SÉCURITÉ IMPORTANTES

1. Général

L'amplificateur ne doit être utilisé qu'en conformité avec les informations indiquées dans le manuel d'utilisation. Avant et pendant l'utilisation de l'amplificateur, s'assurer que toutes les consignes, surtout les consignes de sécurité décrites dans le mode d'emploi sont respectées. L'amplificateur LINUS a été construit pour l'amplification de signaux audio pulsés et ne doit être branché qu'à des enceintes ayant une impédance moyenne comme celle indiquée.

2. Mode d'emploi

Lisez les instructions d'utilisation (Manuel Utilisateur) et prêtez attention à tous les avertissements. Conserver ce mode d'emploi dans un endroit protégé durant toute la vie d'utilisation de l'amplificateur. Ce mode d'emploi fait partie intégrante de l'amplificateur. Il est recommandé de visiter régulièrement le site web de CODA Audio afin d'obtenir les mises à jour et nouvelles versions de ce manuel. La revente de l'amplificateur n'est possible qu'avec le mode d'emploi. Tout changement subi par l'amplificateur doit être documenté par écrit et transmis à l'acheteur dans le cas d'une revente.

3. Environnement

N'utilisez l'amplificateur que dans les environnements classés E1, E2, E3, E4 ou E5 selon la norme IEC/EN 55103-2 : 2010 « Compatibilité électromagnétique - Norme de famille de produits pour les appareils à usage professionnel audio, vidéo, audiovisuels et de commande de lumière pour spectacles. Immunité Norme de famille de produits pour les appareils à usage professionnel audio, vidéo, audiovisuels et de commande de lumière pour spectacles - Partie 2 : Immunité ».

4. Installation/emplacement

Ne pas placer l'amplificateur sur un chariot, un stand, un trépied, un support ou une table instable. Le produit pourrait chuter, s'endommager sérieusement et provoquer de graves blessures. Pour l'installation de l'amplificateur, observez les instructions du fabricant et utilisez les accessoires recommandés par le fabricant.

5. Connection secteur

Branchez l'amplificateur uniquement à une prise électrique avec une connexion à la terre. Ceci est un appareil de Classe 1 qui nécessite une connexion électrique avec prise de terre lors de chaque utilisation. Un défaut de terre peut être à l'origine de hautes tensions présentes sur le châssis métallique. L'interrupteur électrique étant un modèle 'soft', assurez-vous de la bonne isolation de l'amplificateur par rapport à l'alimentation électrique.

6. Protection du cordon d'alimentation

Les câbles d'alimentation électriques sont à disposer de manière à ne pas être piétinés ou coincés par des objets placés au-dessus ou contre eux-mêmes, tout en faisant attention aux câbles et aux fiches et particulièrement au connecteur de sortie de l'amplificateur. Le dispositif de déconnexion du secteur (le câble et connecteur secteur ou le disjoncteur thermique) doit être accessible à tout instant. Si le cordon d'alimentation est endommagé, prenez soin d'en changer avant chaque nouvelle utilisation.

7. Chaleur

Ne pas utiliser l'amplificateur près de sources de chaleur comme les radiateurs, les corps chauffants, les fourneaux ou d'autres dispositifs qui produisent de la chaleur.

8. Eau et humidité

Ne pas exposer le Produit à la pluie ou à l'humidité, ne pas utiliser le Produit à proximité d'eau et ne pas utiliser le Produit s'il est mouillé (par exemple dans des pièces humides ou près d'une piscine). Ne placez jamais des objets contenant des liquides sur le produit (comme par exemple des bouteilles ou des verres). Ne versez pas de liquides sur le Produit. Il s'agit d'un produit IP20 sans protection contre les éclaboussures.

9. Ventilation

Les grilles et les ouvertures dans le boîtier servent à la ventilation et assurent un bon fonctionnement de l'amplificateur tout en le protégeant de la surchauffe. Ces ouvertures ne doivent être ni bloquées ni couvertes. L'amplificateur ne doit être installé que dans un endroit convenablement ventilé et aéré, selon les recommandations du fabricant données dans ce manuel. Lors d'une installation en Rack, assurez-vous d'une aération maximum afin de permettre le refroidissement de l'appareil. L'air froid rentre par l'avant de l'appareil alors que l'air chaud sortira par l'arrière. Assurez-vous que l'arrière de l'appareil n'est pas obstrué afin de permettre une bonne extraction de la chaleur. N'installez pas l'amplificateur ni au dessus ni au dessous d'un appareil n'ayant pas le même système de refroidissement. Si un espace doit-être laissé entre plusieurs appareils alors vous devrez ajouter des faces avant dans les Racks afin de combler ces vides. Aucun ventilateur ni système spécial ne devra être utilisé car ils pourraient réduire le refroidissement naturel de l'appareil.

10. Intrusion d'objets externes et / ou liquides dans l'amplificateur

Ne jamais introduire d'objets d'aucune sorte dans l'amplificateur au travers des ouvertures car ils pourraient être en contact avec des tensions électriques dangereuses ou provoquer un court-circuit de composants et ainsi un feu ou un choc électrique. Ne jamais renverser de liquide sur l'amplificateur. N'utilisez pas l'amplificateur dans un lieu où des objets, du liquide pourrait couler sur ou dans l'amplificateur.

11. Branchements

Avant de connecter des équipements externes à l'amplificateur, assurez-vous de pouvoir le faire en toute sécurité. Débranchez l'alimentation électrique des équipements externes si besoin. Faute de quoi il y a un risque de choc électrique et de lésions sérieuses. Lisez attentivement le mode d'emploi des autres dispositifs et suivez les instructions des autres équipements lors de tous branchements.

12. Foudre

Pour une protection renforcée de l'amplificateur, le débrancher de la prise secteur pendant les orages ou quand il est sans surveillance et / ou non utilisé pendant un temps prolongé. Ainsi, vous éviterez un endommagement de l'amplificateur dû à la foudre et aux surtensions. La déconnexion du secteur n'est possible qu'en retirant la prise de l'alimentation générale ou en débranchant tous les contacts du réseau électrique.

13. Dommages nécessitant une intervention

Dans les cas suivants, débranchez l'amplificateur du réseau électrique et contactez votre revendeur / distributeur ou un atelier autorisé :

- du liquide a été renversé ou des objets sont tombés dans l'amplificateur
- l'amplificateur a été exposé à la pluie ou à l'humidité
- l'amplificateur est tombé ou a été abîmé de quelque façon que ce soit
- le cordon d'alimentation ou la fiche électrique est endommagé
- l'amplificateur ne fonctionne pas de manière normale comme décrit dans le mode d'emploi
- l'amplificateur a été utilisé dans un environnement poussiéreux pendant un temps prolongé

14. Entretien

Toute opération de maintenance ou réparation doit être effectuée par un revendeur / distributeur certifié par CODA Audio. N'essayez pas d'entretenir l'amplificateur par vous-même. L'ouverture de l'amplificateur ou retirer le capot pourrait vous exposer à une tension électrique dangereuse ou à d'autres risques, l'amplificateur ne doit être ouvert que par du personnel qualifié. Veuillez contacter votre revendeur / distributeur.

15. Réparation et pièces de rechange

Si des pièces de rechange sont nécessaire, assurez-vous que votre revendeur / distributeur n'utilise que des pièces de rechange certifiées par le constructeur. L'utilisation de pièces de rechange non autorisées peut causer des lésions et / ou des endommagements par le feu, choc électrique, ou d'autres dangers d'origine électrique.

16. Contrôle de sécurité

Après un entretien ou une réparation du produit fait en dehors de l'Usine, demander au revendeur / distributeur de faire des contrôles de sécurité pour s'assurer que l'amplificateur est en parfait état de fonctionnement. Des conseils pour les contrôles de sécurité se trouvent dans la norme DIN VDE 0701-0702, « Entretien, modifications et test des appareils électriques ».

17. Nettoyage

Assurez-vous de nettoyer périodiquement les filtres à poussière en face avant afin d'assurer un refroidissement optimal de l'appareil. Surveillez l'environnement dans lequel l'amplificateur fonctionne et ajuster les fréquences de nettoyage des filtres en conséquence. Débrancher l'amplificateur de la prise électrique avant de le nettoyer. Ne pas utiliser de produits liquides ou vaporisés. Nettoyez uniquement avec des linges secs.

18. Emballage et expédition

Pour expédier l'amplificateur LINUS veuillez toujours utiliser le carton et l'emballage d'origine. Pour une protection maximale, toujours emballer l'unité comme elle l'a été à sa sortie d'usine.

19. Altitude (pour la Chine)

L'amplificateur ne doit pas être utilisé à des altitudes dépassant 2000 m.



SYMBOLES



ATTENTION

RISQUE DE CHOC ÉLECTRIQUE
NE PAS OUVRIR



ATTENTION —CE PRODUIT PRÉSENTE
DES RISQUES ASSOCIÉS AU
COURANT ÉLEVÉ. TOUT SERVICE
DOIT ÊTRE EFFECTUÉ PAR DU
PERSONNEL AUTORISÉ.



L'ÉCLAIR AVEC LE SYMBOLE DE LA FLÈCHE SERT À AVERTIR
L'UTILISATEUR DE LA PRÉSENCE D'UNE TENSION NON ISOLÉE
À L'INTÉRIEUR DE LA CAISSE.



LE POINT D'EXCLAMATION SERT ÉGALEMENT À AVERTIR L'UTILISATEUR
D'INSTRUCTIONS IMPORTANTES POUR L'ENTRETIEN CONTENUES DANS
LA DOCUMENTATION DE L'AMPLIFICATEUR.



AVERTISSEMENT —POUR ÉVITER DU FEU OU DES CHOC
ÉLECTRIQUES, NE PAS EXPOSER CET AMPLIFICATEUR
À LA PLUIE OU À L'HUMIDITÉ.



ATTENTION —RISQUE DE CHOC ÉLECTRIQUE —NE PAS OUVRIR.



L'AMPLIFICATEUR NE DOIT PAS ÊTRE UTILISÉ À DES ALTITUDES
DÉPASSANT 2000 m.



NE BRANCHER CET AMPLIFICATEUR UNIQUEMENT À
UNE PRISE RELIÉE À LA TERRE.

CE CONFORMITÉ

Déclaration de conformité CE selon les directives CE :

Compatibilité électromagnétique (Directive 2014/30/EU Conseil Européen, EMC)

Basse tension (Directive 2014/35/EU du Conseil Européen, LVD)

2011/65/EU (RoHS2)

Nom du constructeur :

CODA Audio GmbH

Adresse du constructeur :

Boulevard der EU 6, 30539 Hannover, Allemagne

déclare que le produit avec le nom de modèle : Amplificateur **LINUS10-C** est en conformité avec les normes suivantes :

IEC/EN/UL/CSA 62368-1 : 2016 Sécurité

IEC/EN 55103-1 : 2010 Emission (pour tous les environnements E1 / résidentiel à E5 / industriel)

IEC/EN 55103-2 : 2010 Immunité (pour tous les environnements E1 / résidentiel à E5 / industriel)

Les conditions d'utilisation ainsi que les environnements d'exploitation décrits dans le mode d'emploi sont à respecter scrupuleusement.



Svetlomisir Aleksandrov

EC DECLARATION OF CONFORMITY

Hannover, 01.06.2019



Au terme de son utilisation ce produit ne doit pas être éliminé avec les déchets ménagers habituels, mais il doit être déposé dans un point de collecte pour le recyclage d'appareils électriques et électroniques.

Les matériaux sont recyclables conformément à leur identification. Grâce à la réutilisation, le recyclage de matériaux ou d'autres formes de recyclage de vieux appareils vous contribuez de manière significative à la protection de notre environnement.

Veuillez contacter votre municipalité pour connaître le centre de traitement compétent.



WICHTIGE SICHERHEITSHINWEISE

1. Allgemeines

Der Verstärker darf nur in Übereinstimmung mit den Anweisungen und Informationen in dieser Anleitung genutzt werden. Stellen Sie vor und während der Nutzung des Verstärkers sicher, dass allen Anweisungen, insbesondere den Sicherheitsanweisungen Folge geleistet wird. Die CODA Audio LINUS Verstärker sind darauf ausgelegt ein gepulstes Audiosignal zu verarbeiten und zu verstärken. An den Verstärker dürfen ausschließlich Lautsprecher mit den in dieser Anleitung spezifizierten Impedanzen angeschlossen werden.

2. Anleitung

Lesen Sie die Anleitung vor der Benutzung des Verstärkers sorgfältig und beachten Sie alle Warnungen und Sicherheitshinweise. Bewahren Sie diese Bedienungsanleitung zusammen mit dem Garantieschein zum späteren Nachschlagen an einem sicheren Ort auf. Diese stellt einen integralen Bestandteil des Verstärkers dar. Wir empfehlen die CODA Audio Webseite regelmäßig nach Updates und/oder neuen Versionen der Anleitung zu prüfen. Der Wiederverkauf des Verstärkers ist nur möglich, wenn die Benutzeranleitung vorhanden ist. Im Falle des Wiederverkaufs ist der Wiederverkäufer verpflichtet alle Änderungen, die er am Verstärker vorgenommen hat, zu dokumentieren und dem Käufer zur Verfügung zu stellen.

3. Einsatzumgebung

Benutzen Sie den Verstärker nur in E1, E2, E3, E4 oder E5 Umgebungen gemäß IEC/EN 55103-2:2010 „Elektromagnetische Verträglichkeit - Produktfamilienorm für Audio-, Video- und audiovisuelle Einrichtungen sowie für Studio-Lichtsteuereinrichtungen für professionellen Einsatz - Teil 2: Störfestigkeit“.

4. Montage/Aufstellung

Platzieren Sie den Verstärker nicht auf einem instabilen Wagen, Ständer, Dreibein, Rahmen oder Tisch. Dies kann zu ernsthaften Verletzungen von Personen und/oder Beschädigungen des Verstärkers führen. Jegliche Montage darf nur gemäß der Anleitung des Herstellers erfolgen. Es ist nur Montagezubehör zu verwenden, welches vom Hersteller freigegeben wurde.

5. Netzanschluss

Der Verstärker darf nur an Anschlüsse mit einem dedizierten Erdungsleiter angeschlossen werden. Bei dem Verstärker handelt es sich um ein Gerät der Gerätekategorie 1, welches zu jeder Zeit geerdet sein muss. Fehlende Erdung kann unerwartete und hohe Spannungen am Gehäuse und den umliegenden Leitungen verursachen. Da es sich beim Hauptschalter auf der Vorderseite des Gerätes um einen Soft-Switch handelt, muss sichergestellt werden, dass der Verstärker jederzeit vollständig von der Stromquelle getrennt/isoliert werden kann.

6. Netzkabelschutz

Das Netzkabel muss immer so verlegt werden, dass es nicht eingeklemmt, geknickt, überfahren, überlaufen, oder beschädigt werden kann. Dabei ist insbesondere auf die verstärkerseitigen Anschlüsse der Kabel zu achten, da es hier ansonsten auch zu Beschädigungen des Verstärkers kommen kann. Falls Kabel in jedweder Weise beschädigt sind, sorgen Sie für entsprechenden Ersatz vor der weiteren Verwendung.

7. Umgebungstemperatur

Setzen Sie den Verstärker nicht in der Nähe von Hitzequellen wie Heizungen, Heizlüftern, Thermen, Herden oder anderen Wärmequellen ein.

8. Wasser und Feuchtigkeit

Setzen Sie den Verstärker nicht Regen oder Feuchtigkeit aus. Setzen Sie den Verstärker nicht in der Nähe von Wasser (z.B. Schwimmbecken, Brunnen) ein. Stellen Sie keine Gegenstände auf dem Verstärker ab, die Flüssigkeit enthalten (z.B. Gläser, Tassen, Flaschen). Schützen Sie den Verstärker gegen Spritzwasser. Es handelt sich hierbei um IP20 Equipment.

9. Belüftung

Die Schächte und Öffnungen am Kabinett sind für die Ventilation vorgesehen, um einen verlässlichen Betrieb des Verstärkers zu gewährleisten und diesen vor Überhitzung zu schützen. Diese Öffnungen dürfen nicht blockiert oder verdeckt werden. Der Verstärker darf nicht installiert werden sofern keine ausreichende Belüftung sichergestellt ist. Bei der Installation in einem Gehäuse ist dafür Sorge zu tragen, dass ein ungehinderter Luftstrom zur Sicherstellung der maximalen Kühlleistung, gewährleistet ist. Kalte Luft wird durch den vorderen Teil des Gerätes eingeblasen und die heiße Luft an der Rückseite des Gerätes wieder ausgestoßen. Stellen Sie sicher, dass die Rückseite nicht blockiert ist und die heiße Luft daran hindert zu entweichen. Es ist untersagt den Verstärker ober- oder unterhalb eines

Gerätes zu installieren, welches ein anderes Luftstromdesign hat. Wenn mehrere Geräte zusammen in einem Rack montiert werden, muss zwischen den einzelnen Geräten ein Platzhalter fest installiert werden. Dieser Platzhalter darf weder luftdurchlässig noch mit Luftschlitzen versehen sein, da dies signifikant die Leistungsfähigkeit des Luftstroms verringert.

10. Störung durch externe Objekte und/oder Flüssigkeiten

Versuchen Sie niemals Objekte jedweder Art durch die Öffnungen in den Verstärker zu bekommen. Dies kann zu Kontakt mit spannungsführenden Elementen führen, was einen Brand und/oder elektrischen Schlag verursachen kann. Verschütten Sie niemals Flüssigkeiten jedweder Art auf das Gerät. Verwenden Sie den Verstärker nicht in einer Umgebung, in der potentiell Gegenstände und/oder Flüssigkeit auf und/oder in den Verstärker gelangen könnten. Der Verstärker sollte möglichst in einem schützenden Gehäuse und/oder Rack verwendet werden.

11. Verbindung

Bevor Sie externes Equipment an den Verstärker anschließen, prüfen Sie, ob es sicher ist, dies zu tun. Trennen Sie das Equipment von der Stromversorgung, wenn notwendig. Zuwiderhandlungen können zu einem Stromschlag und ernsthaften Verletzungen führen. Lesen Sie Bedienungsanleitung des anzuschließenden Gerätes sorgfältig bevor Sie die Verbindung herstellen.

12. Blitzschlag

Trennen Sie den Verstärker vom Netz für zusätzlichen Schutz des Verstärkers während eines Gewitters oder wenn dieser für längere Zeit nicht benutzt/beaufsichtigt wird. Dies verhindert eine Beschädigung des Verstärkers durch Blitzeinschlag und/oder Netzschwankungen. Eine vollständige Trennung des Verstärkers vom Stromnetz erfolgt nur durch Abziehen des Netzsteckers.

13. Schäden die Serviceleistungen erfordern

Trennen Sie den Verstärker vom Stromnetz und kontaktieren Sie Ihren Händler/Distributor oder ein autorisiertes Service Center wenn eine der folgenden Situationen eingetreten ist:

- Flüssigkeit wurde auf den Verstärker verschüttet,
- Fremdkörper sind in den Verstärker gelangt,
- der Verstärker war Regen oder Feuchtigkeit ausgesetzt,
- der Verstärker wurde mechanisch beschädigt,
- das Netzkabel/der Netzstecker sind beschädigt,
- der Verstärker zeigt ein abnormales Verhalten im Betrieb,
- der Verstärker wurde längere Zeit in einer staubigen Umgebung eingesetzt.

14. Service

Jegliche Reparaturarbeiten müssen durch eine von CODA Audio autorisierte Stelle durchgeführt werden. Versuchen Sie nicht den Verstärker selbst zu reparieren, da das Öffnen des Verstärkers Sie gefährlichen Spannungen und anderen Risiken aussetzen kann. Der Verstärker darf nur von qualifiziertem und autorisiertem Personal geöffnet werden. Bitte wenden Sie sich an Ihren Händler.

15. Ersatzteile

Sofern Ersatzteile benötigt werden stellen Sie bitte sicher, dass Ihr Händler nur vom Hersteller freigegebenen Ersatzteile benutzt. Die Nutzung von nicht freigegebenen Ersatzteilen kann Verletzungen und/oder Schäden durch Feuer, Stromschlag oder andere verwandte elektrische Gefahren verursachen.

16. Sicherheitstest

Nach Beendigung eines Service oder einer Reparatur des Verstärkers stellen Sie sicher, dass der Händler/das Service Center Nach Beendigung von Servicearbeiten an dem Produkt ist es ratsam Sicherheitstests vom Hersteller oder einem von ihm autorisierten Servicepartner (z.B. Händler/Vertrieb) durchführen zu lassen, um sicher zu stellen, dass der Verstärker sachgemäß funktioniert. Empfehlungen zur Durchführung eines solchen Tests können der DIN VDE 0701-0702 „Instandsetzung, Änderung und Prüfung elektrischer Geräte“ entnommen werden.

17. Reinigung

Stellen Sie sicher, dass die Staubfilter regelmäßig gereinigt werden, um die bestmögliche Kühlung des Verstärkers aufrechtzuerhalten. Achten Sie auf die Betriebsumgebung des Verstärkers und stimmen Sie die Reinigung der Staubfilter dementsprechend ab. Trennen Sie den Verstärker vom Netz bevor Sie mit der Reinigung beginnen. Benutzen Sie nur einen trockenen Lappen und keine flüssigen Reiniger oder Aerosole.

18. Verpackung und Versand

Nutzen Sie für den Versand des Verstärkers nur die originale Kartonage. Für ein Maximum an Sicherheit soll der Verstärker vor dem Versand so verpackt werden, wie er ursprünglich vom Werk geliefert wurde.

19. Einsatzhöhe

Der Verstärker soll nur in Höhen bis 2000 m über Meeresspiegel eingesetzt werden.



SYMBOLE



VORSICHT

NICHT ÖFFNEN –
STROMSCHLAGGEFAHR.



VORSICHT: PRODUKT UNTER
HOCHSPANNUNG. ÜBERLASSEN SIE
JEDLICHE WARTUNGSARBEITEN
AUTORISIERTEM KUNDENDIENST.



DAS BLITZSYMBOL WARNT DEN BENUTZER VOR NICHTISOLIERTEN
GEFÄHRLICHEN SPANNUNGEN INNERHALB DES GEHÄUSES.



DAS AUSRUFEZEICHEN SOLL BENUTZER AUF WICHTIGE BETRIEBUNGS-
UND WARTUNGSANLEITUNGEN IN DER
DEM VERSTÄRKER BEIGEFÜGTEN LITERATUR AUFMERKSAM MACHEN.



WARNUNG: UM BRAND ODER STROMSCHLAG AUSZUSCHLIESSEN,
DARF DIESER VERSTÄRKER WEDER REGEN
NOCH FEUCHTIGKEIT AUSGESETZT WERDEN.



VORSICHT: NICHT ÖFFNEN – STROMSCHLAGGEFAHR.



DER VERSTÄRKER DARF NUR IN HÖHE BIS 2000 M EINGESETZT WERDEN.



DER VERSTÄRKER DARF NUR AN VERSORGUNGSNETZEN MIT
SCHUTZLEITER (ERDUNG) ANGESCHLOSSEN WERDEN.

EU-KONFORMITÄTSERKLÄRUNG

EU-Konformitätserklärung gemäß den EU-Richtlinien:

Elektromagnetische Verträglichkeit (EU-Richtlinie 2014/30/EU, EMC)
Elektrische Niederspannungsprodukte (EU-Richtlinie 2014/35/EU, LVD)
2011/65/EU (RoHS2-Richtlinie)

Name des Herstellers: **CODA Audio GmbH**
Adresse des Herstellers: **Boulevard der EU 6, 30539 Hannover, Deutschland**

erklärt, dass das Produkt mit der Modellbezeichnung: **LINUS10-C** den folgenden Normen entspricht:

IEC/EN/UL/CSA 62368-1:2016 Sicherheitsnorm
IEC/EN 55103-1:2010 Emissionen (für alle Umgebungen E1/Wohngebiete bis ES/gewerblich)
IEC/EN 55103-2 :2010 Störfestigkeit (für alle Umgebungen E1/Wohngebiete bis ES/gewerblich)

Die in den Benutzerinformationen angegebenen Betriebsbedingungen sind entsprechend einzuhalten.



Svetlomid Aleksandrov
EU-Konformitätserklärung
Hannover, 01.06.2019



Dieses Produkt darf am Ende seiner Lebensdauer nicht über den normalen Abfall entsorgt werden, sondern muss an einem Sammelpunkt für das Recycling von elektrischen und elektronischen Geräten abgegeben werden.

Die Werkstoffe sind gemäß ihrer Kennzeichnung wiederverwertbar. Mit der Wiederverwendung, der stofflichen Verwertung oder anderen Formen der Verwertung von Altgeräten leisten Sie einen wichtigen Beitrag zum Schutz unserer Umwelt.

Bitte erfragen Sie bei der Gemeindeverwaltung die zuständige Entsorgungsstelle.



1. WELCOME TO CODA AUDIO

CODA Audio is a leading designer and manufacturer of high quality pro audio loudspeaker systems.

Core to our products are a number of unique patented driver technology designs which provide outstanding dynamic results as well as improved precision and reliability over conventional components.

To ensure the highest quality and control over our products, we have our own manufacturing facility in Europe which produces all of the driver and cabinet components. Further benefits to this approach include substantial reductions in cost and quicker times to market for new products.

We have a wide product range offering high quality solutions to satisfy the most discerning and complex professional sound reinforcement applications, ranging from portable to installation to touring.

CODA Audio is represented via a global network of experienced and technically qualified international distributors.

We believe that the best way to get to know us better is by listening to our loudspeakers because:

HEARING IS BELIEVING.

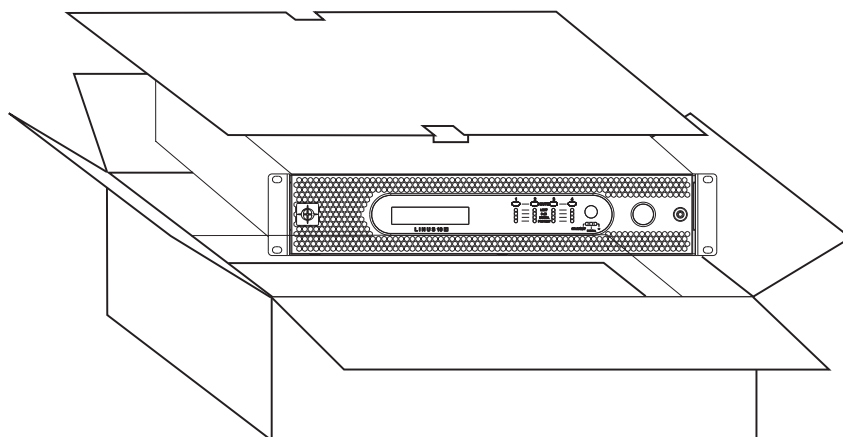
2. THE AMPLIFIER

2.1 Unpacking

Please unpack and inspect your new amplifier for any damage that may have occurred during transit. If damage is found, notify the transportation company immediately. Only you as the consignee may initiate a claim for shipping damage. CODA Audio will be happy to cooperate fully as needed. Please save the shipping carton as evidence of damage for the shipper's inspection.

Even if the amplifier has arrived in perfect condition, save all packing materials for any future transport of the unit. When shipping the LINUS10-C amplifier, always use the original shipping carton and packing materials. For maximum protection, repack the unit as it was originally packed at the factory.

NOTE: Never ship the amplifier without the original packaging materials.



2.2 The amplifier

The LINUS10-C amplifiers offer a power output of:

- 5200 W peak per channel @ 4 Ω
- 5800 W peak per channel @ 2.7 Ω
- 5000 W peak per channel @ 2 Ω .

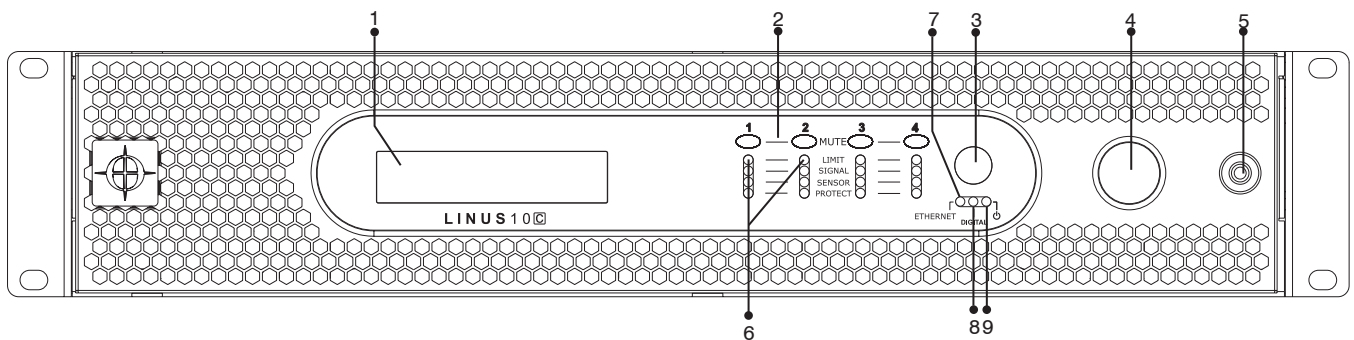
For a complete overview of rated power data please refer to Chapter 5 'SPECIFICATION'.

The LINUS10-C power amplifier is fitted with a **fixed** voltage power supply.

The LINUS10-C uses microprocessors for controlling and monitoring the power amp. This has four main advantages over more traditional power amp systems:

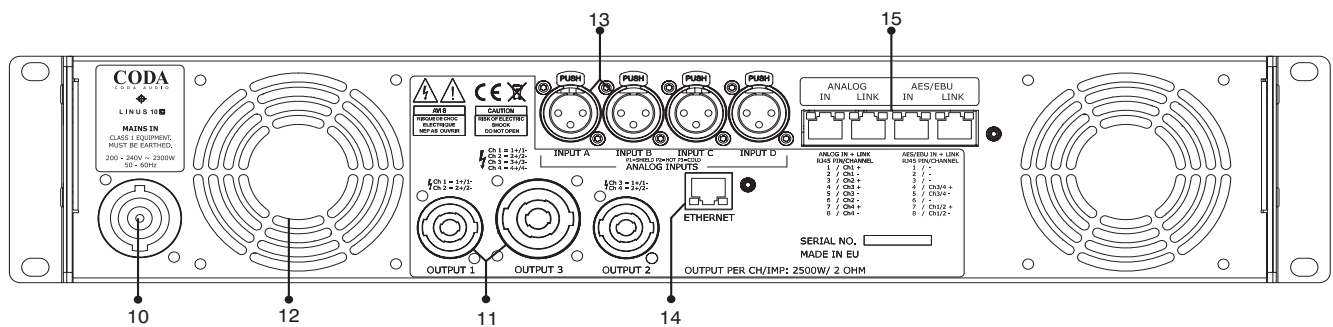
1. Integrated remote control
2. Extreme fast and accurate monitoring of all amplifier parameters
3. Very fast triggering of protection features
4. Fast detection of failures.

The LINUS10-C has been designed as an intelligent and powerful amplifier for performing specialised tasks within a complex audio system. Users can adapt the power amp to meet their specific audio requirements before use. The display mounted on the front of the LINUS10-C amplifier allow the different functions to be accessed. Since there are a lot of parameters available, it is important that users should familiarise themselves thoroughly with the entire range of settings and programmable features before using the power amp. If you have any questions regarding features and/or functions of your LINUS10-C amplifier, CODA Audio will be pleased to provide you with further information. Alternatively, contact your dealer/distributor.



The front

- 1 Display
- 2 Channel mute buttons
- 3 Rotary encoder knob
- 4 Standby power switch
- 5 Knurled grill screw
- 6 LEDs
- 7 Ethernet connection LED
- 8 DAN connection LED
- 9 Mains connection LED



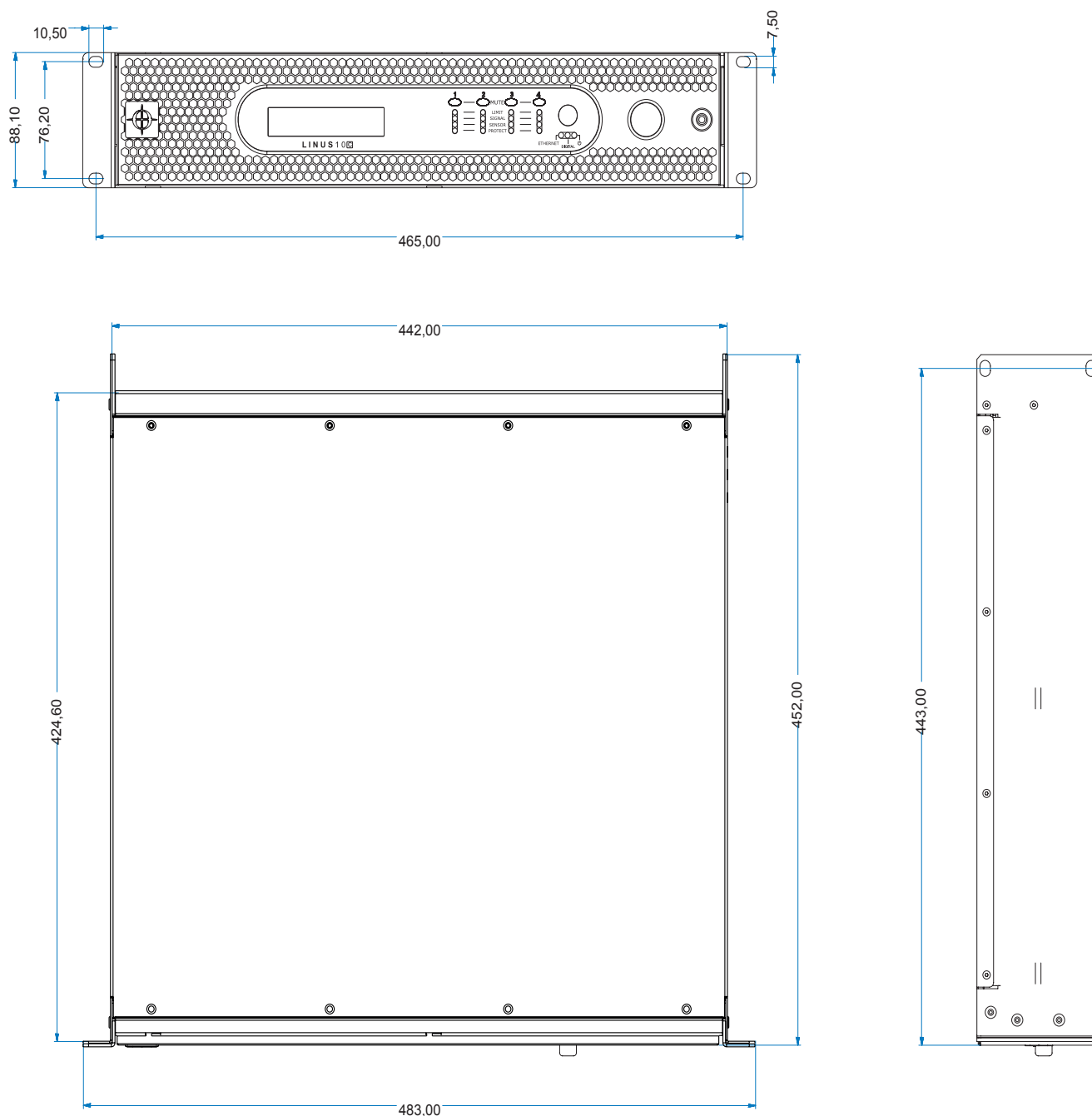
The rear

- 10 AC power connector
- 11 SPEAKON® connectors
- 12 Cooling air outlet vents
- 13 XLR - Line inputs
- 14 Ethernet connector for remote access
- 15 AES/EBU connections
1x IN / 1x LINK

3. INSTALLATION

3.1 Mounting

Use four screws and washers when mounting the amplifier to the front rack rails. For mobile use, the amplifier should also be secured using the 19" mounting elements on the rear panel.



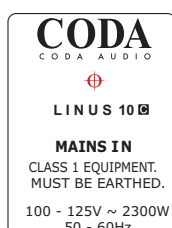
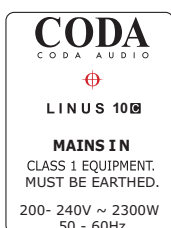
3.2 Cooling

Under normal operation of the power amp, overheating should never be a problem. The air is taken in from the front and out through the back. It is of course essential that, while the power amp is running, the air is able to circulate around it freely. The efficiency of the cooling will depend on both the immediate environment (e.g. an enclosed rack, direct sunlight) and if the front filter is clogged. If the amp is installed in a case, the open area at the back of the case must be at least 140 cm². This area should be in line with the amp. If this cannot be achieved, a forced ventilation system has to be used.

3.3. Mains

3.3.1 Mains supply

Only connect the LINUS10-C amplifier to an appropriate AC circuit and outlet in accordance with the requirements indicated on the rating plate. Only use mains cables with original Neutrik powerCON® 32 A connectors for safety reasons.



The LINUS14 is shipped with an EU Style Schuko connector, which must be protected by a 16A mains circuit breaker. For optimum amplifier output, larger circuit breakers may be used with alternative connectors, please contact CODA Technical Support for guidance.

Please do NOT use much larger mains breakers than recommended here and especially do NOT connect several LINUS10-C amplifiers to one single (very large) breaker.

Always respect this rule of thumb for good installation practice for guaranteeing long term reliable, robust and safe operation: **One LINUS10-C - one circuit breaker.**

As soon as the amplifier is connected to mains, the primary capacitors are charged through the inrush current limiter. At the same time the auxiliary power supply is activated, powering the main controller and the display. This allows powering up the main SMPS from the switch on the amplifiers front panel.

NOTE: Turning the amplifier off from the user interface (1/0 switch) does not disconnect the amplifier from mains. Disconnecting the amplifier from the mains can only be achieved by physically removing/disconnecting the mains cable. The mains cable therefore has to be freely accessible at all times.

Attention: Never unplug the powerCON® connector while the amplifier is playing music.

Always turn the amplifier off from the front panel before disconnecting the powerCON® connector.

Alternatively, you can disconnect the amplifier from the mains via an external all-pole disconnection (e.g. a mains breaker). Disconnect the mains cable during a lightning storm or when the amplifier remains unused or unsupervised for a prolonged period of time.

If a power cut occurs while the amplifier is switched on, it will restart automatically once the mains distribution has been restored. All settings prior to the loss of power will be maintained.

3.3.2 Inrush current limitation

The LINUS10-C has a special processor dedicated to limit the mains inrush current. This limiter will take action anytime:

- when connecting the amplifier to the mains through the mains cable,
- when switching the amplifier on through an external mains breaker,
- the mains voltage was lost for at least 4 half-cycles or more (e.g. a short voltage drop).

This limiter will confine the mains current to a value smaller than $20 A_{rms}^*$.

*Maximum rms value of inrush current over one half-cycle of the mains voltage according to IEC/EN 55032:2016-02 (Electromagnetic compatibility of multimedia equipment - Emission requirements: German version EN 55032:2012/AC:2013).

NOTE: Even under normal conditions the mains current can reach levels up to 32 A/64 A (230 V/115 V) and even higher for very short periods of time. This could cause lamps to flicker if connected to the same mains as the amplifier. The impedance of the AC circuit should be less than 0.157Ω to avoid flicker according to EN61000-3-11 "Electromagnetic compatibility- Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in the public low-voltage supply systems - Equipment with rated current $\leq 75 A$ and subject to conditional connection" (IEC 77A/929/CDV:2016). If in any doubt, consult your local power provider. Never attempt to measure this impedance level with your Ω meter. This may damage your meter and expose you to the risk of electric shock.

3.3.3 Mains power consumption and current draw

Due to the huge output power of LINUS10-C the mains current draw can get very high when demanding large output powers. Please refer to following table for an overview of mains currents and power consumption under different operating conditions.

Operating condition	Mains current (4 Ω)	Power consumption (4 Ω)	Output power (4 Ω)
Amplifier standby (power off)	0.21 A	47 W	0 W
Idle (amplifier power on)	1.12 A	249 W	0 W
300 W per channel / $\frac{1}{8}^{th}$	7.5 A	1642 W	1200 W
600 W per channel / $\frac{1}{4}^{th}$	14.5 A	3146 W	2400 W
800 W per channel / $\frac{1}{3}^{rd}$	20.0 A	4340 W	3200 W

Mains current draw and power consumption @ 230 V, 50 Hz

Measured with pink noise with crest factor of 12 dB to represent typical music signal.

For 115 V mains operation, the current values can be multiplied by 2.

Please note that the values given here are typical values only, measured on a standard 230 V/50 Hz outlet. The actual mains current draw can vary depending on the music signal and the mains characteristics (especially the mains impedance) of any specific installation.

3.4 Signal inputs

The LINUS10-C amplifier offers two different input signal sources:

- **Analog:** In this mode the analog signals connected to the XLR input connectors will be used as input signal. There are additional RJ45 connectors for analog connections. These are wired parallel to the XLR inputs.
- **AES/EBU:** With the AES/EBU setting the input signals are taken from the RJ45 connection.

3.4.1 Analog input

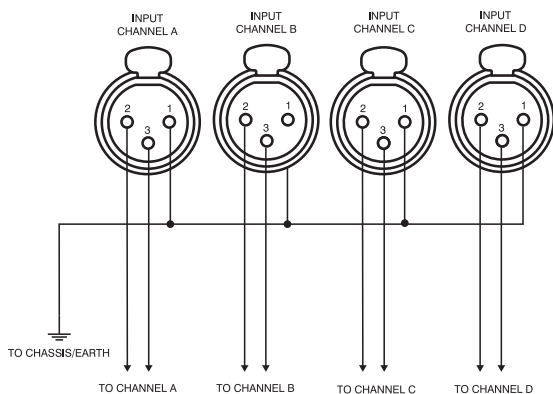
XLR:

Pin 1 = Ground (to chassis/earth)

Pin 2 = Hot (in polarity, “+”)

Pin 3 = Cold (out of polarity, “-”)

We suggest to always use symmetrically (balanced) shielded cable to connect the amplifier.

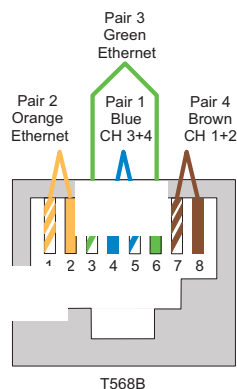


Analog RJ45 pin wiring

RJ45-pin	Colour	Channel (polarity)
1	orange-white	1 (+)
2	orange	1 (-)
3	green-white	2 (+)
4	blue	3 (+)
5	blue-white	3 (-)
6	green	2 (-)
7	brown-white	4 (+)
8	brown	4 (-)

3.4.2 LiNET-C AES/EBU input/output

The AES/EBU input and output connectors allow you to receive and send multichannel digital audio streams to other AES/EBU-compatible devices (like other LINUS10-C amplifiers for example). Please note that although the AES/EBU and Ethernet connectors use the same connector type (RJ45), the physical transmission protocols are different. So any direct connection between the AES/EBU connectors and standard Ethernet connectors will not work. Digital Audio Input (AES/EBU) via LINET Master/Switch or ATEC allows to daisy chain up to four (4) devices on short cable lengths (double shielded Cat6 cable, max. 30 cm).



AES/EBU RJ45 pin wiring

RJ45-pin	Colour	Channel (polarity)
1	orange-white	-/-
2	orange	-/-
3	green-white	-/-
4	blue	3/4 (+)
5	blue-white	3/4 (-)
6	green	-/-
7	brown-white	1/2 (+)
8	brown	1/2 (-)

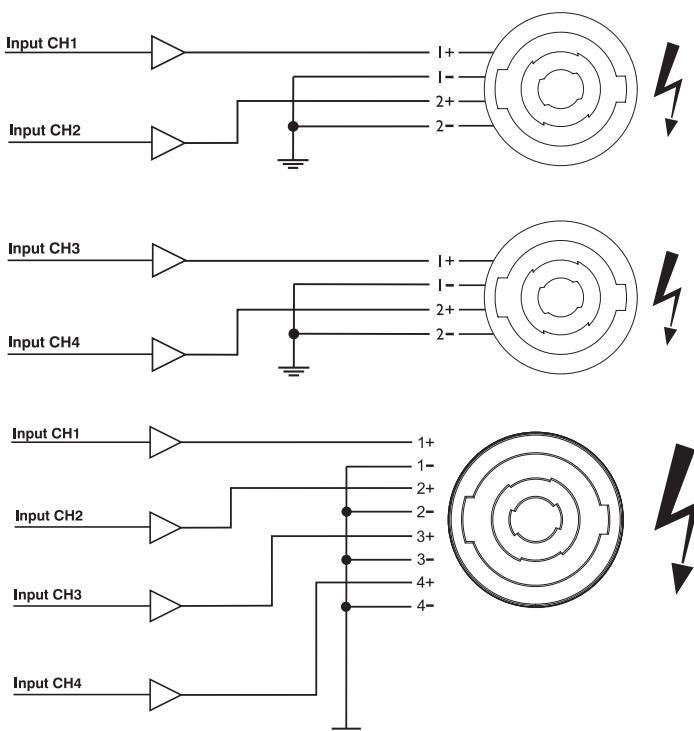
3.5 Remote control inputs (Ethernet)

The Ethernet link network connector allows you to access the LINUS10-C from a host computer for remote control, firmware update and downloading DSP presets. Please note that for setting up proper network connection you need to use the **CODA Audio LINUS Control** software.

3.6 Power outputs

Both SPEAKON® connectors are connected to the channel A and channel B amplifier outputs. The pin configuration of the SPEAKON® connectors is as follows:

Left SPEAKON® Output	Pin 1 +	Channel 1 amplifier output
	Pin 1 -	Channel 1 ground
	Pin 2 +	Channel 2 amplifier output
	Pin 2 -	Channel 2 ground
Right SPEAKON® Output	Pin 1 +	Channel 3 amplifier output
	Pin 1 -	Channel 3 ground
	Pin 2 +	Channel 4 amplifier output
	Pin 2 -	Channel 4 ground
Centre SPEAKON® Output	Pin 1 +	Channel 1 amplifier output
	Pin 1 -	Channel 1 ground
	Pin 2 +	Channel 2 amplifier output
	Pin 2 -	Channel 2 ground
	Pin 3 +	Channel 3 amplifier output
	Pin 3 -	Channel 3 ground
	Pin 4 +	Channel 4 amplifier output
	Pin 4 -	Channel 4 ground



WARNING!

SPEAKON® connector marked with the lightning flashes indicate high voltages that are potentially life threatening.

Wiring to these terminals requires installation by an instructed person or the use of ready-made leads or cords.

Custom wiring should only be carried out by qualified personnel.

To prevent electric shock, do not operate the amplifier with any of the conductor portion of the speaker wire exposed.

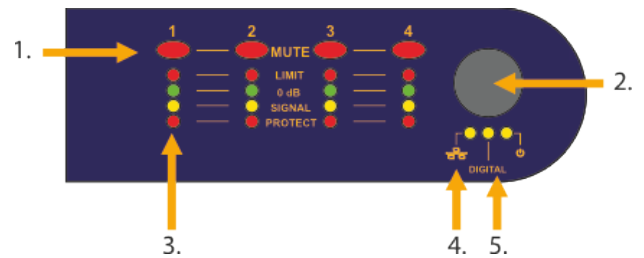
NOTE: For reasons of safety and performance only use high-quality fully insulated speaker cables of stranded copper wire. Use the largest wire size that is economically and physically practical. Make sure that the cables are not longer than necessary.

4. OPERATION

4.1 Screen user interface

Indication:

1. Channel mute/ channel selection buttons
2. Rotary encoder knob selects, changes and enters parameters
3. Signal, limit and protection LEDs
4. Ethernet connection LED
5. Digital input signal selected (LINET-C) LED



Display indicator:

1. Snapshot number
2. Speaker loaded
3. Amplifier's name
4. Module's number

4.1.1 Main menu

Press the encoder knob to enter the "MAIN MENU".

```

▶ 0: MAIN MENU ◀
1: SELECT INPUT
  
```

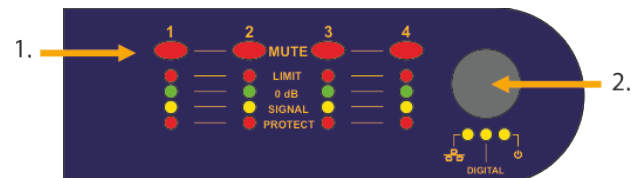
4.1.2 Select input

Rotate the encoder knob to the point 01: "SELECT INPUT".
Press the encoder knob to enter the input source selection.

```

0: MAIN MENU
▶ 1: SELECT INPUT ◀
  
```

Press and hold (1) channel selection button for the appropriate channel and rotate the encoder knob (2).
Example shows channel 1 selected and digital input channel 1 is routed to output 1 (in 2 -> out 2, in 3 -> out 3, etc.).



4.1.3 Input signal routing

Move the selection field with the rotary encoder knob to the desired amplifier channel.
Select the input signal type and source (analog or digital):
- Input signal chart - analog inputs: A, B, C, D
- AES (digital) inputs: 1, 2, 3, 4.

```

Input Source CH=0
A      B      C      D
  
```

```

Input Source CH=1
1      2      3      4
  
```


4.1.4 Output gain

Rotate the encoder knob to the point 02: "OUTPUT GAIN".

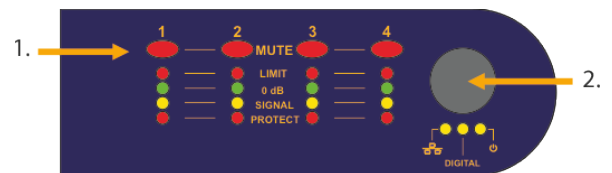
Press the encoder knob to enter "GAIN" selection.

► 2: OUTPUT GAIN ◀
3: OUTPUT DELAY

GAIN
+0 +0 +0 +0

GAIN CH=1 +1.0
+1 +0 +0 +0

Press and hold (1) channel action button for the appropriate channel and rotate the encoder knob (2).
Example shows channel 1 selected with +1.0 dB gain value.



4.1.5 Output delay

Rotate the encoder knob to the point 03: "OUTPUT DELAY".

Press the encoder knob to enter "DELAY" selection.

Press and hold (1) channel action button for the appropriate channel and rotate the encoder knob (2).

Example shows channel 1 selected with 1.00 ms delay.

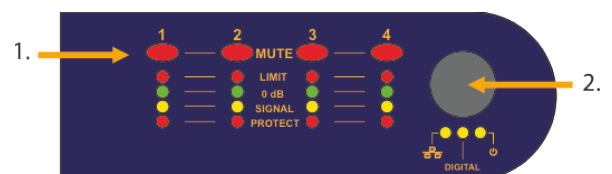
Info: You can select a larger scroll value by pressing the encoder knob and vice versa.

Maximum 200 ms delay per channel.

2: OUTPUT GAIN
► 3: OUTPUT DELAY ◀

DELAY
.00 .00 .00 .00

DELAY CH=1 1.00ms
1.00 .00 .00 .00



4.1.6 Load snapshot

Rotate the encoder knob to the point 04: "LOAD SNAPSHOT".

Press the encoder knob to enter Snapshot selection.

Rotate encoder knob to scroll through snapshot library (number 01 to 20).

Press and hold encoder knob to recall selected snapshot.

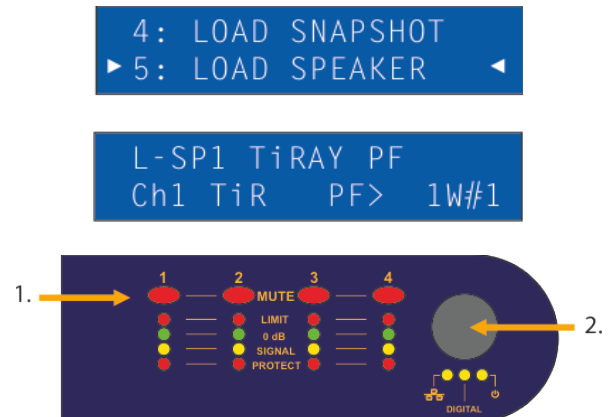
► 4: LOAD SNAPSHOT ◀
5: LOAD SPEAKER

LOAD SNAPSHOT
S 1:XXXXXX

4.1.7 Load speaker

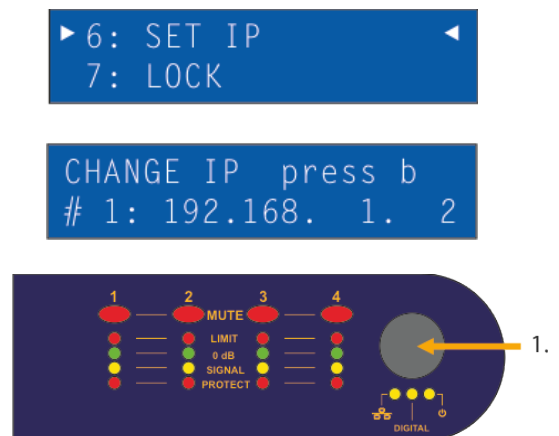
Rotate the encoder knob to the point 05: "LOAD SPEAKER".
Press the encoder knob to enter speaker selection.
Press and hold (1) channel action button for the appropriate channel and rotate the encoder knob (2).

Example shows channel 1 selected with TiRAY speaker.
You can always check selected speakers in the home display by press and hold channel selection buttons.



4.1.8 Set IP

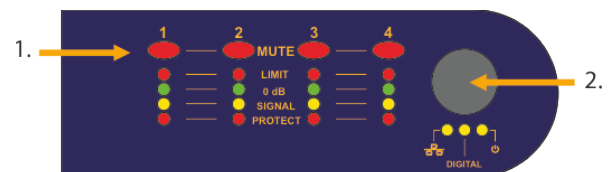
Rotate the encoder knob to the point 6: "SET IP".
Press the encoder knob to enter IP address setup page.
Rotate the encoder knob (1) to select module number "CHANGE IP address".
Press encoder 4 sec to confirm.



4.1.9 Lock unit

Rotate the encoder knob to the point 07: "LOCK".

Press and hold (1) channel action button 1 to lock the display and use encoder knob to define the code (fixed code provided by manufacturer).



Once the code is entered the display returns back to main page automatically.

The lock symbol in the main display represents a locked display.

To unlock the display rotate the encoder knob to the point 07: "LOCK".

Rotate the encoder knob (1) to type in code, press and hold (2) channel action button 1 to unlock the display.

Once the code is entered the display returns back to main page automatically.

Code to unlock the display will be provided by the manufacturer.



Unlock Display
MUTE1 => Unlock

4.1.10 System temperature

Rotate the encoder knob to the point 8: "SYSTEM TEMP".

► 8: SYSTEM TEMP ◀
9: BACKLIGHT

Press the encoder knob to enter "MODULE TEMPERATURE" page.

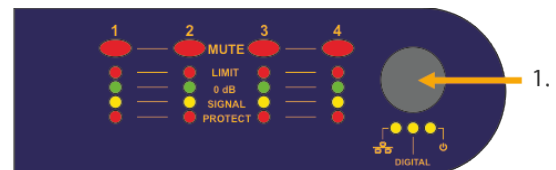
MODULE TEMPERATURE
33C 306K 91F

4.1.11 Backlight

Rotate the encoder knob to the point 9: "BACKLIGHT".

► 9: BACKLIGHT ◀
A: INFO

Press the encoder knob to enter backlight setup page.



Rotate the encoder knob (1) to select option for permanent backlight or auto deactivate (after 25 sec).

Backlight Press b
[ON] AUTO

4.1.12 Info

Rotate the encoder knob to the point A: "INFO".

Press the encoder knob to enter info page.

9: BACKLIGHT
► A: INFO ◀

4.2 Power amp protection systems

4.2.1 DC protection

Each output of the power amp is constantly monitored for persistent DC voltage levels. If the 15 V threshold voltage is exceeded at any of the outputs, the SMPS will be automatically switched off to prevent further damage from overload to the power amplifier and speakers. In this case the display will show "DC Error", so that only a complete disconnection of the mains power brings the amplifier to a restart. A DC issue can be located in the output stage, the driver stage, or at the input of the amplifier.

4.2.2 Output stage

When a persistent DC voltage is located at an output stage, the main SMPS will be permanently switched off. This will be indicated on the display as "DC Error".

4.2.3 Overload protection

The output stage is permanently monitored for possible overload situations. There are varying limiting levels of overload protection depending on input mains voltage. These limits will be set automatically. This improves reliability without degrading sound quality when driving complex loads.

4.3 Mains protection

4.3.1 Inrush current limitation

Within 1 second of the LINUS10-C amplifiers being connected to the mains, the inrush current limiter will charge the primary capacitors in a controlled way, limiting the maximum mains current during power-up.

4.3.2 Mains overvoltage detection

There is NO overvoltage protection! The customer needs to be sure to only use the LINUS10-C in the voltage range printed on the label on the back of the unit!

4.4 Main SMPS protection

4.4.1 Overcurrent protection

The main SMPS (Switched Mode Power Supply) transformer current of your LINUS10-C amplifier is continuously monitored. If overcurrent occurs, the main SMPS immediately will stop working. Should there be an internal failure, this feature prevents other parts from being damaged.

4.4.2 Overload protection

In case of extremely high output levels with heavily clipped output signals and low loudspeaker impedances $< 2.5 \Omega$, this additional protection will reduce the amplifier stage output power very quickly. If activated, this indicates that the amplifier is running close to its absolute maximum power capacity and the limit LEDs on the front panel are flashing.

In normal operation this protection should never be activated.

4.4.3 Thermal protection

The temperature of the main SMPS transformer of the LINUS10-C amplifier is permanently monitored. If the temperature exceeds $75^{\circ}\text{C}/167^{\circ}\text{F}$, the main SMPS will switch off. The amplifier's display will indicate a "Power error" in this case.

4.5 Fans

The fans mounted in your LINUS10-C amplifier operate permanently, but as long as the temperature remains below $40^{\circ}\text{C}/104^{\circ}\text{F}$, they run at their slowest speed. The highest detected temperature from the heatsinks channel controls the speed of the fans. Above $40^{\circ}\text{C}/104^{\circ}\text{F}$ the speed is increased until it reaches its maximum value.

4.6 Filter cleaning

The air intake on the front of your LINUS10-C amplifier is fitted with a removable filter system. If the filter becomes clogged, the unit will not cool as efficiently as it should and may result in reduced output levels.

For changing the filter, no additional tools are required. First remove the knurled screw right next to the standby switch. Then, push the whole grill-assembly carefully to the right and pull it straight of. The grill is hooked into the amplifiers main enclosure, so be careful not to bend or break the hooks. The foam is just pinched in between the enclosure and the grill.

5. SPECIFICATION

General

Number of output channels	4
Output stage	Class D
Internal samplerate / bit-depth	96 kHz / 24 bit
Signal-to-noise ratio (22 Hz - 20 kHz, 4 Ω - analogue input)	> 112 dB (unweighted) > 115 dB (A-weighted)
Signal-to-noise ratio (22 Hz - 20 kHz, 4 Ω - digital input)	> 114 dB (unweighted) > 117 dB (A-weighted)
Frequency response (8 Ω load with CLEAR preset)	20 Hz – 20 kHz = (+0.5 dB / -1.0 dB)
THD+N (4 Ω load @ 120 W output power)	20 Hz – 17 kHz = < 0.1%
Latency (input to loudspeaker output)	Minimum 2.70 ms AES/EBU input Minimum 2.00 ms Analogue input
Protection circuits	Inrush current limiter Thermal limiter Output DC SMPS over-current Output overload
LED indicators	Mute status Limit 0 dB Signal Protection Ethernet control active Digital signal locked Power on
Ethernet connection	1 x 10 Mbps RJ45

AC Mains

AC mains input connector	Neutrik 32 A powerCON®
AC mains input voltage** (230 V internal jumper setting)	180 V = Minimum 230 V = Nominal 264 V = Maximum
AC mains input voltage** (115 V internal jumper setting)	85 V = Minimum 115 V = Nominal 132 V = Maximum
AC mains frequency	47 – 63 Hz
Power consumption* (1/4 power = 600 W @ 4Ω to represent typical music signal)	Amplifier in standby = 47 W Amplifier idle = 249 W Amplifier ¼ power = 3146 W

Input

Input sources	Analog & AES/EBU
Analogue input impedance (balanced)	30 kΩ
Maximum input level (analogue differential)	+15 dBu / 4.36 Vrms
Input connections	4 x XLR3 Analogue IN 1 x RJ45 Analogue IN (4x CH) 1 x RJ45 Analogue LINK (4 x CH) 1 x RJ45 Digital IN (4 x CH) 1 x RJ45 Digital LINK (4 x CH)
Supported digital input formats (internal SRC)	32 kHz / 44.1 kHz / 48 kHz / 88.2 kHz / 96 kHz / 176.4 kHz / 192 kHz

Output

RMS output power* (20 Hz - 20 kHz, THD < 0.01%) (all channels driven)	1400 W @ 8 Ω 2500 W @ 4 Ω 3100 W @ 2.7 Ω 3700 W @ 2 Ω
Peak output power* (20 Hz - 20 kHz, 6 dB Crest Factor) (all channels driven)	3200 W pk @ 8 Ω 5200 W pk @ 4 Ω 5800 W pk @ 2.7 Ω 5000 W pk @ 2 Ω
Maximum output voltage*	+/- 170 V pk
Maximum output current*	+/- 52 A pk
Damping factor (8 Ω load, 1 kHz and below)	> 800
Minimum output load	2 Ω nom
Power output connections	2 x Neutrik NL4 speakON® 1 x Neutrik NL8 speakON®

Thermal

Operating temperature	+5° C to +55° C 41° F to 131° F
Thermal output (BTU/h)	696.08 = Idle 1910.80 = 20% 3739.71 = 50% 6776.51 = 100%
Thermal output (kWh)	0.204 = Idle 0.560 = 20% 1.096 = 50% 1.986 = 100%
Cooling	2 x thermally controlled fans Hot air expelled at rear

Physical

Dimensions (W x H x D)	483.5 x 88 x 454.18 mm 19.04" x 3.46" x 17.88" (2 Rack units)
Shipping dimensions (W x H x D)	675 x 130 x 560 mm 26.57" x 5.12" x 22.05" Volume = 0.049 m ³ 1.73 ft ³
Net weight	14.3 kg 31.5 lbs
Shipping weight	17.5 kg 38.6 lbs

* Typical values – some variation may exist due to component tolerances.

** Voltage range should not be exceeded. Amplifier output power performance will degrade below nominal voltage and increase above nominal voltage.

6. PERFORMANCE

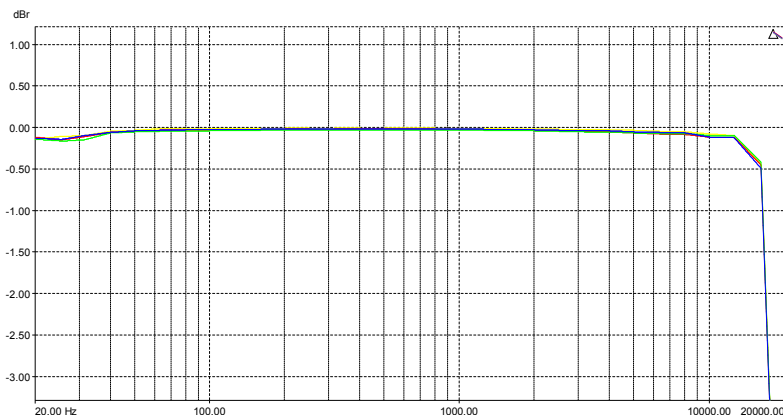


Figure 6.1

Gain vs. frequency w/AES17-filter
@ 120 W output power,
4 Ω (measurement of a typical performance)

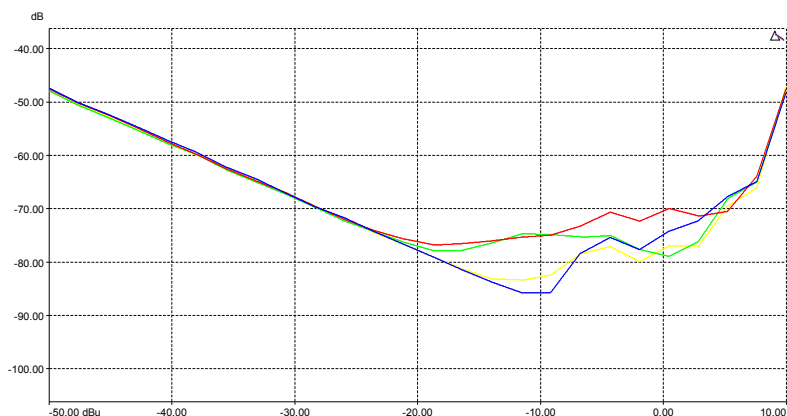


Figure 6.2

THD+N w/AES17-filter @ -50 dBu --> +10 dBu,
4 Ω (measurement of a typical performance)

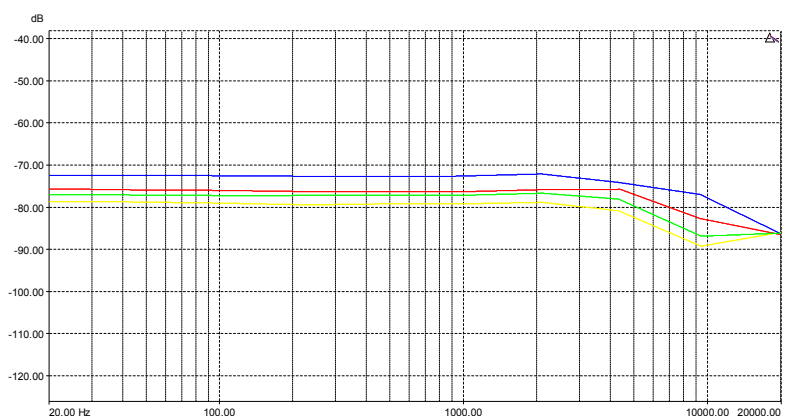


Figure 6.3

THD+N w/AES17-filter @ 20 Hz--> 20 kHz,
120 W output power, 4 Ω
(measurement of a typical performance)

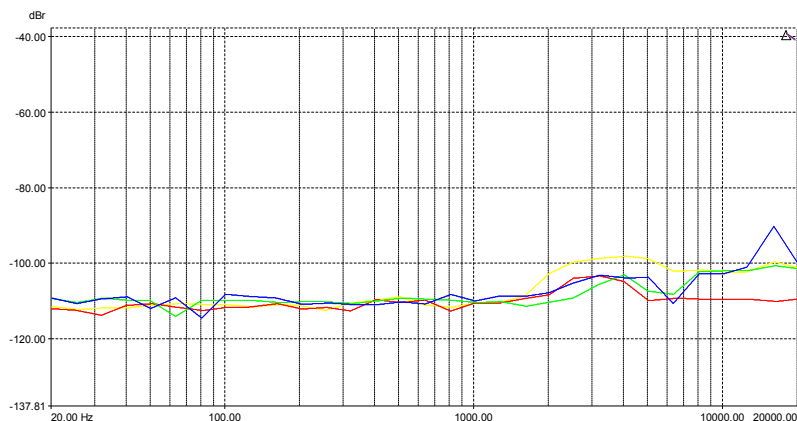


Figure 6.4
Channel separation OR crosstalk
@ 20 Hz--> 20 kHz
(measurement of a typical performance)

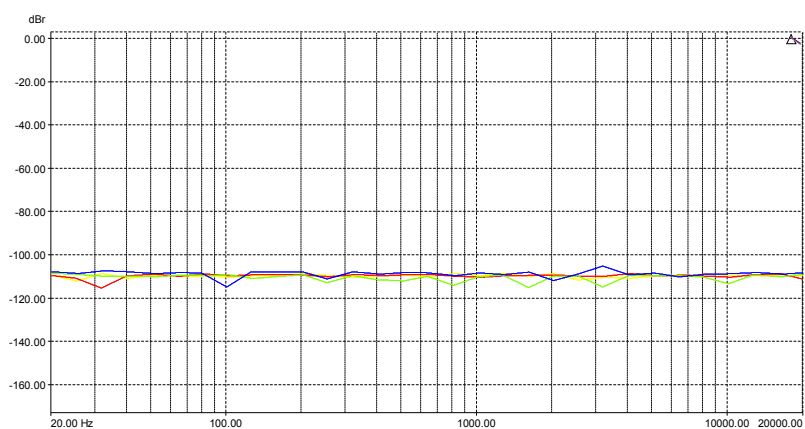


Figure 6.5
Common mode rejection
@ 20 Hz--> 20 kHz
(measurement of a typical performance)

7. WARRANTY

7.1 Warranty

CODA Audio guarantees the LINUS10-C amplifier to be free from defective material and/or workmanship for a period of five (5) years from the date of sale. When a defect occurs under normal installation and use, CODA Audio will repair the product under this warranty. In this event, please return the amplifier to your dealer/distributor together with a copy of your sales receipt as proof of purchase.

This warranty provides that examination of the returned product must indicate in our judgement a manufacturing defect.

7.2 Items excluded from this warranty

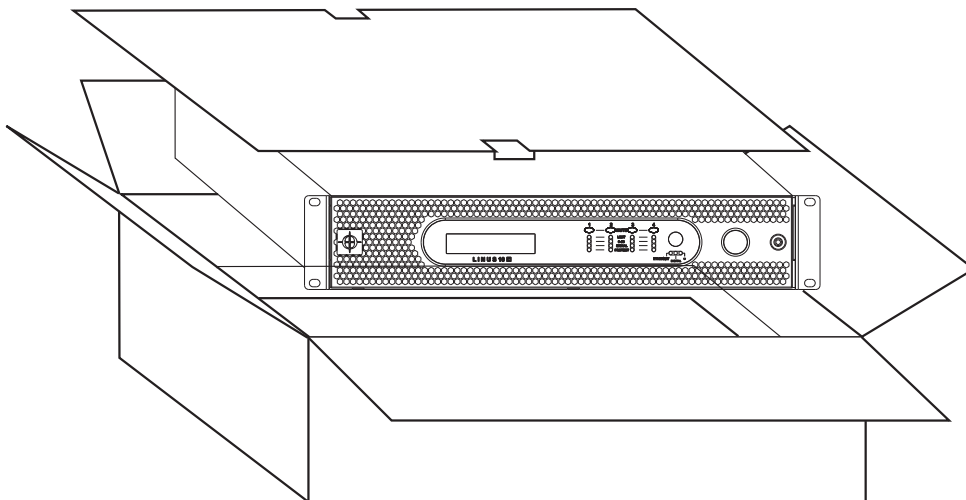
CODA Audio is not liable for any damage caused by shipping accidents, misuse, abuse, operation with incorrect AC voltage, operation with faulty peripheral equipment, modification or alteration without prior factory approval, service by an unauthorized service centre and normal wear and tear. Amplifiers on which the serial number has been removed or defaced are not eligible for warranty service.

7.3 What CODA Audio will do

CODA Audio (or its appointed agent) undertakes to rectify any defect regardless of the reason for failure (unless excluded from this warranty), by repair, replacement or refund as it sees fit.

7.4 How to obtain warranty service

You must notify your dealer/distributor of your need for warranty service. All components must be shipped in the original packaging.



7.5 CODA Audio's product improvement

CODA Audio reserves the right to improve the technical standard of its products without giving prior notice. If in any doubt, please consult your dealer/distributor or contact CODA Audio directly for clarification. We are always working on making CODA products even better and accessible all over the world. Please check our website for the latest list of approvals and certificates.

7.6 Warranty form

PLEASE ENCLOSE THIS COMPLETED FORM WITH THE AMPLIFIER, DO NOT SEND IT SEPARATELY!

Owner's information

Company name: _____

Contact: _____

Address: _____

Telephone: _____

Fax: _____

Email address: _____

Model: _____

Serial number: _____

Purchase date: _____

Expired warranty/ If the warranty has expired, payment will be: Cash / Cheque / VISA / MasterCard

Shipping address: _____

To transport the amplifier, the original packing materials must be used. Please return the amplifier to the following address or your nearest CODA Audio appointed distributor.

Nature of problem occurred. Please describe the conditions that existed when the problem occurred and what attempts were made to correct it:

Other equipment in your system:

8. MAINTENANCE INFORMATION

Cleaning and servicing work on the inside of the amplifier must only be carried out by qualified personnel.

Qualified personnel is defined as a person who has gained specialised relevant knowledge of electronic engineering through education, training, and experience, and who has sufficient knowledge of all relevant governmental work safety regulations to be in a position to judge the safe functioning of power amplifiers based on technical rules according to IEC/ EN 62368-1:2018 ("Safety Requirements for Audio, Video or similar Electronic Appliances").

In order to guarantee the safe functioning of the amplifier, it has to be checked regularly, depending on its application but at least once a year, by a properly qualified person.

Advice on how to carry out these checks can be found in DIN VDE 0701-0702:2008-06 "Safety Checks for Electronic Appliances".

An amplifier that is considered to be unsafe must be labelled accordingly and stored in a safe place to prevent this amplifier being used mistakenly.

9. DECOMMISSIONING

During the decommissioning process of the amplifier, all legally prescribed rules and procedures must be adhered to.

10. WHAT'S IN THE BOX

Shipped with Schuko to powerCON 32 A 1 meter cable. LINET-C Breakout Cable - Ethercon to x2 RJ45.
One RJ45 labelled 'Ethernet' the other labelled 'AES/EBU'. To be used in conjunction with ATEC.

